SOUTHEAST ALASKA DRIFT GILLNET FISHERY

MANAGEMENT PLAN, 2002

by
Southeast Region Management Staff

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INTRODUCTION

This management plan provides an overview of the expected salmon run sizes, management issues, and harvest strategies for the Southeast Alaska drift gillnet fisheries in 2002.

There are approximately 480 limited entry permits in the Southeast Alaska drift gillnet fishery of which over 95% are actively fished each year. Drift gillnet landings have averaged approximately 4.0 million salmon annually from 1991 to 2000. Of the total commercial salmon harvest in Southeast Alaska, the drift gillnet fishery harvests an average of 38% of the sockeye, 19% of the chum, 12% of the coho, 4% of the pink, and 4% of the chinook salmon (1960 to 2000 data).

The drift gillnet fishery primarily targets sockeye, pink, and summer chum salmon during the summer season and coho and fall chum salmon during the fall season. Chinook salmon are usually harvested incidentally, although some targeted chinook salmon fisheries are allowed in terminal hatchery areas in the spring. Currently, there are no directed drift gillnet fisheries for natural stocks of chinook salmon in Southeast Alaska.

There are five drift gillnet fishing areas in Southeast Alaska: District 1 (Tree Point and Portland Canal), District 6 (Prince of Wales), District 8 (Stikine), District 11 (Taku-Snettisham), and District 15 (Lynn Canal). In addition, drift gillnet fisheries occur in several terminal areas adjacent to hatchery facilities. Each of these gillnet fisheries are discussed separately in this management plan.

SALMON RETURNS

In Southeast Alaska, the Alaska Department of Fish and Game (ADF&G) issues a regionwide preseason return forecast only for pink salmon. Otherwise, the projected returns of sockeye, chum, and coho salmon presented in this management plan are strictly qualitative and should not be considered official department forecasts. The return projections are calculated primarily from parent-year catch and escapement data and are expressed in terms of probable magnitude of return relative to historic levels.

Returns of natural and hatchery produced summer chum salmon stocks are anticipated to be average in most areas. Returns of hatchery-produced, summer chum salmon are expected to contribute significantly to the District 1, 11, and 15 gillnet fisheries but it is anticipated that the total Southeast Alaska hatchery chum salmon return will be well below levels observed prior to 2000 and near those observed in 2001. Poor returns of fall chum salmon are expected to the Taku/Snettisham and Lynn Canal fisheries. Overall, returns of coho salmon should be above average due, in part, to significant hatchery contributions. The total, all-gear pink salmon harvest is expected to be strong with a regional harvest of approximately 30 to 52 million fish. The major portion of this harvest will be taken by purse seine gear.

MANAGEMENT APPROACH

A flexible management approach is required because of the lack of accurate preseason forecasts for salmon returns to the drift gillnet fishing areas. Thus, this management plan presents only a general outlook of how the season is expected to develop. Some specific management approaches may be altered depending on inseason assessments of salmon run strength. Gillnetters are encouraged to contact department management staff listed at the end of this plan for more detailed information.

The primary objectives for management of the 2002 drift gillnet fishery are:

1. Obtain overall salmon spawning escapement goals with the best possible distribution to all systems.

2. Provide for an orderly fishery while harvesting those fish in excess of escapement needs.

3. Promote the harvest and processing of good quality fish within the constraints dictated by run size.

4. Manage for a total Southeast drift gillnet catch of 7,600 chinook salmon, exclusive of Alaska hatchery-produced fish [5 AAC 33.367(a)(2)].

5. Minimize, to the extent possible, the interception of salmon destined for locations where weak returns are expected.

6. Manage District 1, 6, 8, and 11 drift gillnet fisheries consistent with the provisions of the U.S./Canada Pacific Salmon Treaty.

Achievement of these management objectives will be accomplished by inseason adjustments of fishing time and area to control harvests in specific areas in accordance with salmon run strength and timing. Comparisons of current-year fishing performance to historical fishing success (i.e., catch per unit effort, or CPUE analysis) are a major component of inseason run strength assessment. This approach assumes catch rates are an accurate reflection of run strength by time period and can be relied upon to indicate salmon escapements through the fishing area.

Past experience has demonstrated that management of salmon fisheries based only on fishery performance (CPUE) data can be misleading, especially for mixed-stock fisheries. Therefore, other available run-strength indicators will also be used including spawning escapements, stock composition estimates, test fishing, observed salmon concentrations in sanctuary areas, catches from other fisheries, and salmon run timing models.

The increasing availability of hatchery-produced salmon, in particular coho and summer chum salmon, has become a major factor in the management of the Southeast Alaska drift gillnet fisheries. Where inseason management is based on fishery performance, it may be difficult to gauge natural stock run strength if significant numbers of hatchery fish are present in the catch. Where possible, the hatchery component of the catch will be separated when evaluating fishery performance.

Weekly Fishing Announcements

Inseason management of the District 1 drift gillnet fishery is conducted by the Ketchikan area management staff; Districts 6 and 8 by the Petersburg and Wrangell area staff; District 11 by the Juneau area staff; and District 15 by the Haines area staff. Because permit holders can move freely among all drift gillnet fisheries, the Juneau regional office will coordinate weekly fishing announcements for all areas. These will normally be released simultaneously in all area offices by mid-afternoon each Thursday during the fishing season.

Weekly Fishing Periods

Weekly fishing periods can generally be expected to begin on Sunday at 12:01 p.m. Exceptions include the Northern and Southern Southeast Regional Aquaculture Association's (NSRAA & SSRAA) terminal fisheries in Deep Inlet, Nakat Inlet, and Earl West Cove, where rotational harvest plans for drift gillnet, seine, and troll fisheries will apply.

U.S./CANADA PACIFIC SALMON TREATY

The U.S./Canada Pacific Salmon Treaty (PST) will influence management of the District 1, 6, 8, and 11 drift gillnet fisheries. The management provisions specified by the PST will be considered separately under the specific management plan for each respective fishery. Gillnetters are encouraged to contact local department staff for more detailed information concerning Alaska's PST obligations under the ten-year agreement signed in 1999.

CHINOOK SALMON CATCH

Regulation 5 AAC 33.367(a)(2), specifies a catch limit of 7,600 chinook salmon (exclusive of Alaska hatchery fish harvested in terminal harvest areas) for the Southeast Alaska drift gillnet fishery. The Alaska Board of Fisheries adopted this regulation to ensure the various user groups maintain their recent-year share of the total chinook salmon harvest quota.

The need for management measures to comply with the drift gillnet harvest quota for chinook salmon will depend on inseason evaluation of chinook salmon catch rates relative to the 7,600 fish ceiling. If the need arises, nighttime fishing closures may be implemented in certain areas to reduce the incidental catch of immature, "feeder" chinook salmon. As in past years, early-season area closures may be needed to

minimize the incidental harvest of mature, "spawner" chinook salmon returning to the Stikine River in District 8, the Taku River in District 11, and the Chilkat River in District 15.

TREE POINT AND PORTLAND CANAL FISHERY

Introduction

The Tree Point and Portland Canal drift gillnet fishing area consists of regulatory Sections 1-A and 1-B. This fishery targets summer chum and sockeye salmon early in the season, followed by pink salmon, and finally fall chum and coho salmon at the end of the season.

2002 Outlook

Chum salmon returns to natural spawning systems are expected to be below average to Portland Canal as a result of lower than average escapements to the major chum salmon producing systems in this area. Chum salmon escapements to systems in Boca de Quadra and Behm Canal were at satisfactory levels. The department will pay close attention to Portland Canal chum in 2002 and will take necessary management action early in the season to ensure escapement goals are met. The department will conduct aerial surveys starting in mid-June to determine the strength of returning chum salmon to these areas.

In the spring of 1999, the United States and Canada negotiated a ten-year annex for the Tree Point fishery. The new agreement calls for the following:

A. Manage the Alaskan District 1 drift gillnet fishery to:

   i. Achieve an annual catch share of Nass sockeye salmon of 13.8 percent of the Annual Allowable Harvest (AAH) of the Nass sockeye salmon stocks that year.

   ii. Carry forward from year to year annual deviations from the prescribed catch share arrangement.

The AAH each year will be calculated as the total run of adult Nass sockeye salmon in that year less the escapement target of 200,000 fish. In the event that the actual Nass spawning escapement for the season is below the target level, the actual spawning escapement will be used in the AAH calculations.

The total run calculation includes the catches of Nass sockeye salmon in the principal boundary area fisheries and the spawning escapement to the Nass watershed. This includes the catch of Nass sockeye salmon in Alaskan Districts 1, 2, 3, 4, and 6 net fisheries; Canadian Areas 1, 3, 4, and 5 net fisheries and Canadian Nass inriver fisheries. Catches in other boundary area fisheries may be included as jointly agreed by the Northern Boundary Technical Committee.

Although the management intent shall be to harvest salmon at the allowable percentage AAH, it is recognized that overages and underages will occur and an accounting mechanism is required. The payback mechanism for the fishery will be based on the number of fish a party is over or under its AAH.

The management intent for the fishery shall be to return any overages to a neutral or negative balance as soon as possible. After five years of consecutive overages, a management plan must be provided to the Northern Panel with specific management actions that will eliminate the overage. The accrual of underages in not intended to allow either Alaska or Canada to modify its fishing behavior in any given year to harvest the accrued underage.

While the management plan for the early weeks at Tree Point will take into account the overage, it is not the intent of the Treaty to severely disrupt the conduct of any of the Boundary area fisheries in any given year to eliminate an overage. The department will look at the early season run strength of the Nass River, the early season run strength of southern Southeast Alaska wild stock summer chum, and the effort levels at Tree Point when making management decisions prior to the start of the District 1 Pink Salmon Management Plan.

Early season options include a reduction from the normal four-day starting week, area reduction, a mandated 6-inch mesh size, or a combination of those options. At this time the department is contemplating a reduction in the time fished during the early portion of the season.

The Canadian Department of Fisheries and Oceans has a preseason expectation of approximately 1 million Nass River sockeye salmon . If the 2002 forecast is accurate then the AAH for Tree Point will be approximately 138,000 Nass River sockeye salmon. This level of harvest may need to be reduced in order to continue to bring Tree Point back towards a neutral or negative balance for Nass River sockeye salmon.

Poor escapements of sockeye salmon to Hugh Smith Lake in Boca de Quadra (District 1) continues to be a conservation concern. The interim escapement range for Hugh Smith sockeye is 18,000 to 35,000 fish. Harvest rates on Hugh Smith sockeye salmon can range from 20 to 90%. The total forecasted return of Hugh Smith sockeye salmon in 2002 is 21,000 to 28,000. This forecast is based on the out migration of both wild and back planted fry from SSRAA's enhancement work. If the sockeye salmon escapement in early July is inadequate, area or time restrictions may be implemented in early to mid-July. The duration and extent of the restrictions will be based upon observed escapement of Hugh Smith sockeye salmon and the need to harvest surplus pink salmon stocks bound for Boca de Quadra.

Hatchery returns of summer chum, fall chum, and coho salmon to SSRAA's Nakat Inlet remote release site are expected to contribute significantly to the Tree Point gillnet fishery in 2002. The 2002 projected returns are approximately 150,000 summer chum, 20,000 fall chum, and 15,000 coho salmon. Peak chum salmon catches from these releases are expected between mid-July to mid-August for summer chum and late August to early September for fall chum and coho salmon.

Pink salmon returns are expected to be strong to southern Southeast Alaska in 2002. If the actual return is as strong as the forecast, Tree Point gillnet fishery should have four- and five-day fishing weeks beginning at the start of the District 1 Pink Salmon Management Plan.

The District 1 Pink Salmon Management Plan (5 AAC 33.360) establishes gillnet fishing time in Section 1-B in relation to District 1 purse seine fishing time when both gear types are concurrently harvesting the same pink salmon stocks. By regulation, the plan starts on the third Sunday in July (July 21, 2002) with the following fishing time schedule:

1. When the purse seine fishery is open for any portion of one day during a fishing week, the drift gillnet fishery must be open for 48 hours during the same fishing week.

2. When the purse seine fishery is open for any portion of two days during a fishing week, the drift gillnet fishery must be open for 96 hours during the same fishing week.

3. When the purse seine fishery is open for any portion of three or more days during a fishing week, the drift gillnet fishery must be open for 120 hours during the same week.

Management Goals

Management goals for the 2002 Tree Point drift gillnet fishery are as follows:

1. Manage the fishery in accordance within the Pink Salmon Management Plan (5 AAC 33.360).

2. Manage the fishery consistent with the current provisions of the PST (5 AAC 33.361).

Management Plan

The Tree Point gillnet fishery will open by regulation in Section 1-B beginning 12:01 p.m., Sunday, June 16, 2002. At the time of the writing of this plan, a final decision had not been made about the initial week of fishing. That decision will be made when early season Nass River run strength indicators are examined in early June. The duration of subsequent fishing periods, through mid-July, will be based on the need to stay with the 13.85% of the AAH of Nass River sockeye salmon, and to continue to bring sockeye salmon overage back to a neutral or negative balance.

As in recent years, the catch of hatchery-produced, summer chum salmon returning to the Nakat Inlet release site will not be included in the evaluation of natural stock fishery performance. The contribution of Nakat Inlet chum salmon will be estimated by inseason analysis of coded wire tag data. Hatchery chum salmon have contributed as much as 71% of weekly catches at Tree Point and as much as 31% of the total harvest in recent years.

The PST requires that interception of natural stocks of chum salmon returning to Portland Canal streams be minimized to ensure rebuilding of these stocks. As a result no fishing should be expected in Section 1-A for Portland Canal chum salmon unless it is determined that a harvestable surplus exists. Any management decision to fish Portland Canal must assume there is sufficient additional surplus fish to support a Canadian as well as an Alaskan fishery.

The Section 1-B gillnet fishery will be managed according to the District 1 Pink Salmon Management Plan starting July 21, 2002. The overall pink salmon returns to southern Southeast Alaska is expected to be strong in 2002. If the returns come in as predicted then beginning in mid-July though the end of

August, Tree Point gillnetters can anticipate four- and five-day fishing periods. The department is unlikely in 2002 to make changes in the District 1 Pink Salmon Management Plan in order to comply with the provision of the PST. By the third week in July, when District 1 Pink Salmon Management begins, approximately 75% of the annual sockeye salmon harvest has already occurred.

In 2002, management of the Southeast purse seine fishery is anticipated to undergo changes from recent year's 2-days-on/2-days-off fishing schedule. It is possible that during the peak of the pink salmon returns in the month of August the purse seine fleet will be fishing four or more consecutive days. This will not effect the management of the Tree Point fishery under the District 1 Pink Salmon Management Plan.

Fall management at Tree Point starts after the end of the pink salmon season. During the fall season, the Tree Point fishery targets primarily on fall chum and coho salmon. Little is known about the stock composition of the chum and coho salmon harvest at this time of the year. However, if the estimated exploitation rate of the Hugh Smith Lake coho salmon stock, which reaches 80% in some years (average 67% since 1982), holds true for adjacent areas then wild coho salmon stocks in the surrounding Tree Point area may benefit from a closing date at Tree Point of approximately September 20. Due to the uncertainties of the escapement levels of the stocks being harvested, the documented high exploitation rate of Hugh Smith Lake coho salmon, and the high preponderance of hatchery fish in the harvest, the department will continue to take a conservative approach to the fall season at Tree Point. However, fishing periods may be allowed after September 20 if fisheries performance data indicates above average returns of wild chum and coho salmon.

Increased hatchery production of fall chum and coho salmon from the Nakat Inlet release site has resulted in increased effort during some seasons at Tree Point. This increase in effort has likely increased harvest rates on wild stocks. During recent years, approximately 50% of the fall chum and coho salmon have been hatchery fish. Nakat Inlet fish not harvested in the common property fisheries can be harvested in the Nakat Inlet Special Harvest Area, which remains open to commercial fishing through late October.

PRINCE OF WALES AND STIKINE FISHERIES

Introduction

The District-6 drift gillnet fishery occurs in the waters of northern Clarence Strait and Sumner Strait, in regulatory Sections 6-A, 6-B, and 6-C, and portions of Section 6-D. The Stikine fishery encompasses the waters of District 8 surrounding the terminus of the Stikine River. Due to their close proximity, management of these fisheries is interrelated, resulting in some major stocks being subject to harvest by both fisheries. Two distinct management areas exist within each district; the Frederick Sound (Section 8-A) and Wrangell (Section 8-B) portions of District 8, and the Sumner Strait (Section 6-A) and Clarence Strait (Sections 6-B, 6-C, and 6-D) portions of District 6. Terminal hatchery fisheries for harvesting returns to the Crystal Lake (ADF&G), Earl West Cove (SSRAA), and Anita Bay hatchery facilities will be discussed in the TERMINAL HATCHERY FISHERIES portion of this management plan.

2002 Outlook

The 2002 Stikine River sockeye salmon return is expected to be at a very low level and decreased fishing time will be required to ensure optimum escapement into Tahltan Lake. The Tahltan sockeye salmon escapement goal of 24,000 fish established by the Pacific Salmon Commission, Transboundary Technical Committee (TTC) has not been reached since 1996. Although the 2001 escapement of 14,811 sockeye salmon to Tahltan Lake was well below goal, it was a dramatic improvement over the 2000 escapement of 6,076 sockeye salmon, which was the lowest since 1988. The returns of the Tahltan Lake sockeye salmon and the Tuya Lake enhanced sockeye salmon are expected to be similar to the 2001 returns and below the 1992–2001 average. Mainstem sockeye stocks are expected to be similar to 2001 and below the long-term average. Due to the near identical return timing of the Tahltan Lake and Tuya Lake stocks, any open fishing periods in District 8, and to a limited extent in District 6, will be determined by the actual inseason abundance of the wild Tahltan Lake stock. The returns of local area sockeye salmon stocks should be similar to the past four years. Parent year escapements into Salmon Bay, Red Bay, and Luck Lake were near the average of the previous four years. If large sockeye salmon catches do not occur during and after the third week in July, extensions or 3-day openings in District 6 should be not be anticipated.

Below average pink salmon returns are forecast for District 6 spawning streams, and fishing may be limited during August. Parent-year escapements to District 6 were poor.

No directed fishing occurs on chum salmon in either District. Chum salmon are caught incidentally in fisheries for sockeye, pink, and coho salmon. It is anticipated that the chum catches in District 6 will be good and similar to 2001 season catches and the catches in District 8 will be significantly lower than for the past 5 to 6 years. There will be no returns of chum salmon to the Anita Bay Hatchery facilities in 2002. The first returns of chum salmon to Anita Bay are expected in 2003. Summer chum production from Ketchikan area hatcheries and the Earl West Cove releases are expected to be similar to the 2001 production. Chum salmon returning to the Ketchikan area facilities migrate through Districts 6 and are expected to contribute significant numbers to the catches in this district. Alaska hatchery contributions to

the total chum catch for the past 10-years have averaged 36% of the District 6 chum catch and 23% of the District 8 chum catch.

The overall coho salmon returns for 2002 are expected to be slightly less than in 2001. SSRAA summer coho remote release sites at Neck Lake and Burnett Inlet in upper Clarence Strait are expecting returns of approximately 75,000 and 4,000 respectively. The combined 2001 returns to these facilities was approximately 100,000. Approximately 205,000 fall coho salmon are projected to return to enhancement projects in the Ketchikan area, that is approximately 79,000 less than actually returned in 2001. Coho salmon returns to Earl West Cove have been shifted to Anita Bay. The coho salmon returns to Anita Bay are projected to be approximately 20,000, which is 7,000 more than actually returned to Earl West Cove in 2001. Wild coho salmon returns for 2002 are expected to be slightly less than 2001 and the 1996–2000 average. The jack returns to southern Southeast systems in 2001 were lower than the 2000 return. Extended fishing periods in Districts 6 or 8 could occur after Statistical Week 35 (last week in August). However, actual fishing periods will be determined weekly inseason based on coho salmon catch rates and hatchery contribution.

Management Goals

Management goals for the District 6 and District 8 gillnet fisheries for the 2002 season are as follows:

1. Minimize the catch of Tahltan Lake sockeye salmon while harvesting enhanced Tuya Lake sockeye salmon.
2. Minimize the interception of chinook salmon returning to the Stikine River while harvesting sockeye salmon returning to the Stikine River.
3. Obtain pink salmon spawning escapement goals in District 6 and District 7.
4. Maintain spawning escapement goals of sockeye salmon in local Alaskan systems while harvesting increased numbers of enhanced sockeye salmon returning to the Stikine River.
5. Manage the District 6 and District 8 gillnet fisheries consistent with the provisions of the Pacific Salmon Treaty (5 AAC 33.361).

Management Plan

The sockeye salmon fishery in both districts will be managed in accordance with the Transboundary Rivers (TBR) Annex of the PST. The Annex allows the District 6 fishery to be managed for harvesting local Alaskan sockeye salmon stocks and normally is not influenced under most conditions by the presence of sockeye salmon stocks of Stikine River origin. However, due to the anticipated low returns of Tahltan sockeye salmon in 2002, stock conservation management actions in District 6 will be necessary to maintain the health of this stock. Management of the District 8 fishery is based on the need to harvest sockeye salmon of Stikine River origin, as allowed by the sharing provisions of the TBR Annex, and the conservation of the resource. The 2002 Stikine River returns, specifically returns to Tahltan Lake, are not anticipated to be strong enough to fulfill PST obligations and also allow significant fishing time in

District 8. In an attempt to try to attain the desired escapement, severe reductions in fishing time in District 8 will be necessary.

The season will start at 12:01 p.m. on Sunday, June 16 for a 48-hour open period in District 6 and District 8 will be closed. Subsequent openings will be determined inseason based on catches and stock proportion data. Due to the high potential for an extremely weak Tahltan return, no openings should be expected in District 8 and no fishery extensions should be expected in District 6 for the first four to five weeks of the gillnet season. If inseason catch and stock data indicate that the Tahltan sockeye salmon return is much larger than expected and that additional fishing time would not constitute a risk to the health of the stock then more liberal fishing periods may be allowed.

Management actions during the sockeye salmon fishing season will be based on analysis of CPUE and stock identification data to determine the availability of Stikine River fish. These stock abundance indicators, along with fishery performance and stock composition data obtained from a Canadian test fishery will be incorporated into a Stikine sockeye salmon management model. As the season progresses, this model will be the primary method used to estimate the availability of sockeye salmon for harvest by the Alaskan fishery in District 8 and the Canadian inriver fisheries. Any conservation measures required for Stikine River sockeye salmon are implemented first in District 8 followed by Sumner Strait in District 6. Reductions in fishing time or area or district-wide closures will be used when conservation measures are needed. All openings will be based upon the most recent Stikine sockeye model update and the current weekly sockeye salmon harvest. Announcements for fishery extensions or any mid-week opening will be announced on the fishing grounds by 10:00 a.m. of the last day of the regular fishery opening. Open area and fishing time may not necessarily be the same as the general weekly opening.

Pink salmon should begin entering District 6 in significant numbers by the third or fourth week of July. The early portion of the pink salmon fishery will be managed primarily on CPUE. By mid-August, pink salmon destined for local systems will begin to enter the fishery in greater numbers and at that time management will be based on observed escapements. If returns are not evenly dispersed throughout the district, area restrictions may be necessary.

The coho salmon season will occur during late August and early September. Management of the District 6 fishery will be based predominantly on wild stock CPUE. Crystal Lake Hatchery, Burnett Inlet Hatchery, facilities in the Ketchikan area, the Anita Bay remote release site and the Neck Lake remote release site at Whale Pass all contribute coho salmon to the District 6 and District 8 fisheries. Inseason estimates from coded microwire tag recovery data will be used to identify the hatchery component of the catch. Only the catch of wild coho salmon will be used for fishery performance evaluation.

Regulation 5 AAC 33.310(c)(2)(B) allows gillnetting along the Screen Island shore of Section 6-D only during the early and late portions of the season. Specifically, this area encompasses those waters of Section 6-D west of a line from Mariposa Rock Buoy to the northernmost tip of Point Harrington to a point on the shore of Etolin Island at 56°09'35" N. latitude, 132°42'42" W. longitude to the southernmost tip of Point Stanhope. Actions by the Board of Fisheries, based on an agreement between gillnet and purse seine representatives at the board meeting in February 2000, increased the fishing time for gillnetting in this area by one week on each end of the closure. The periods when fishing may be allowed are now: 1) from the second Sunday in June (June 9) through the first Saturday in August (August 3) and, 2) from the first Sunday in September (September 1) until the season is closed. During this time, gillnetting is allowed during same time periods that the adjoining waters of Section 6-C are open.

TAKU/SNETTISHAM GILLNET FISHERY

Introduction

The Taku/Snettisham (District 11) gillnet area encompasses Section 11-B (Taku Inlet, Port Snettisham, and Stephens Passage south of Midway Island) and Section 11-C (Midway Island south to a line from Point League to Point Hugh). This fishery has traditionally targeted on sockeye salmon during the early portion of the season and fall chum and coho salmon later in the season. In recent years, the fishery has also targeted hatchery summer chum salmon.

2002 Outlook

The return of wild Taku River sockeye salmon in 2002 is expected to be slightly above average. This is based on both spawner-recruit analysis and a sibling forecast. The main parent year, 1997, had an escapement of 71,000 fish, which was the low end of the escapement goal range of from 71,000 to 80,000 fish, and below the ten-year average escapement of 102,000. The 1998 parent year had an escapement of 74,000 fish. Adult returns to date from the joint U.S./Canada Taku River sockeye salmon enhancement project at Tatsamenie Lake have been low, but the Tatsamenie Lake smolt outmigration of 777,000 in 1999 would indicate an above average return for 2002. Returns of wild Port Snettisham sockeye salmon stocks are difficult to project because escapement enumeration programs were not in place during all brood years. Escapement through the Speel Lake weir in the 1997 parent year was 5,000 sockeye salmon, below the ten-year average escapement of 9,000, while the weir count in the 1998 parent year was an above average 13,400 sockeye salmon. The aerial survey estimate for Crescent Lake escapement in the 1997 and 1998 parent years were 5,300 and 5,400, respectively. Enhanced sockeye salmon returning to the Douglas Island Pink and Chum, Inc. (DIPAC) Snettisham Hatchery are expected to total 294,000 fish.

Returns of hatchery summer chum salmon to the District 11 area are expected to be less than the returns in the previous three years. Approximately 229,000 summer chum salmon are expected to return in 2002 from DIPAC hatchery releases in Gastineau Channel. Chum returns from Limestone Inlet remote releases are expected to total another 170,000 fish. Additional fishing time can again be expected in order to harvest summer chum salmon returns to the Limestone Inlet remote release site. Returns of fall chum salmon to the Taku River are expected to be poor.

Returns of Taku River coho salmon are expected to be above the ten-year average. Parent-year escapements of coho salmon in Canadian portions of the Taku River were 61,000 fish in both 1998 and 1999. Both were below the ten-year average escapement of 76,000 but well above the above border goal of 38,000 fish, and adequate to produce a good return in 2002 under favorable environmental conditions. DIPAC projects a 2002 return of hatchery coho salmon comparable to recent years of between 71,000 to 89,000 from their smolt releases into Gastineau Channel.

Returns of pink salmon to District 11 systems are expected to be below average in 2002; the escapement goal was not met in the parent year for District 11. Parent year pink numbers through the Canyon Island

fishwheel were below average, and indicated below average escapement in the Taku River. Returns in 2002 from DIPAC fry releases into Gastineau Channel are expected to total 35,000 pink salmon.

The return of Taku River chinook salmon in 2002 is expected to be better than in 2001 and near the long term average.

Management Goals

Management goals for the 2002 Taku/Snettisham drift gillnet fishery are as follows:

1. Provide for sufficient salmon spawning escapements to Taku River, Port Snettisham, and Stephens Passage streams while harvesting those fish in excess of escapement needs.

2. Minimize, to the extent practical, the incidental harvest of chinook salmon to stay within the Board of Fisheries Southeast drift gillnet allocation of 7,600 non-Alaska hatchery chinook salmon.

3. Manage the fishery consistent with current provisions of the PST (5 AAC 33.361). Long-term harvest sharing agreements for Taku River sockeye and coho salmon were specified in the 1999 Pacific Salmon Treaty agreement.

4. Maximize the harvest of hatchery-produced chum salmon returning to Limestone Inlet while minimizing the incidental harvest of Port Snettisham wild sockeye salmon.

5. Manage the return of enhanced Port Snettisham sockeye salmon consistent with the Board of Fisheries Snettisham Hatchery Management Plan (5 AAC 33.378).

Management Plan

The District 11 gillnet fishery will be managed in accordance with the Transboundary River (TBR) Annex of the PST. Harvest sharing arrangements for sockeye and coho salmon through the 2008 fishing season are specified in the Annex. The Canadian inriver gillnet fishery is allocated 18% of the total allowable catch (TAC) of wild Taku sockeye salmon originating from Canadian portions of the Taku drainage, and can harvest 20% of inriver escapements above 100,000 sockeye salmon. Harvests of sockeye salmon produced from joint U.S./Canada enhancement programs in the Taku River are to be shared equally by the two countries. For coho salmon, the Annex calls for the U.S. to manage its fisheries to achieve a minimum above-border run size of 38,000 fish. In addition, incidental harvests of coho salmon in the Canadian directed sockeye salmon fishery are allowed and directed harvests of 3,000 to 10,000 coho salmon are allowed depending on run size.

The District 11 fishery will be managed through mid-August primarily on the basis of sockeye salmon abundance. Run strength will be evaluated using fishery catch and CPUE data and weekly inriver run size

estimates derived from the Taku River fish wheel mark-recapture project operated by ADF&G at Canyon Island. Contribution of enhanced stocks of sockeye salmon will be estimated inseason by analysis of salmon otoliths sampled from the commercial harvests. The age and stock compositions of the harvest of wild sockeye salmon will be estimated after the fishing season by analysis of scale pattern and parasite incidence data from commercial catch samples.

Section 11-B will open by regulation on the third Sunday in June (June 16) for a 3-day fishing period. Fishing time in subsequent weeks will depend on developing run strength. Nighttime fishing closures may be instituted to limit incidental catches of immature chinook salmon. Harvests and CPUE of chinook salmon in the Juneau recreational fishery prior to the opening of the gillnet fishery and catches during initial gillnet openings will be evaluated to determine the need for night closures during the 2002 season.

Extended fishing time is expected in Stephens Passage to harvest the return of enhanced summer chum salmon to the Limestone Inlet remote release site. The department plans to implement a six-inch minimum mesh size restriction in Section 11-B south of Circle Point beginning in early July to minimize the incidental harvest of wild Port Snettisham sockeye salmon during these openings. Outer portions of Limestone Inlet may be opened prior to mid to late July to allow additional access to returns to the remote release site. The department also plans to implement full retention (5 AAC 39.265) in the District 11 drift gillnet fishery as was done in 2001 beginning in week 27 (June 30).

The return of enhanced Port Snettisham sockeye salmon is expected to be higher than in previous years of the fishery, and will be managed according to the Board of Fisheries' Snettisham Hatchery Management Plan. The plan provides basic guidelines for managing enhanced sockeye salmon production from Port Snettisham including the following provisions, in order of priority:

1) Sustainable production of wild sockeye salmon from Crescent and Speel Lakes.

2) Management of enhanced Snettisham sockeye salmon returns may not prevent achieving escapement goals or PST harvest sharing agreements for Taku River salmon stocks.

3) Assessment programs shall be conducted to estimate Snettisham wild sockeye salmon stock escapements and contributions of enhanced sockeye salmon to the District 11 commercial fishery.

4) Common property harvests in the Speel Arm SHA shall be conducted by limiting time and area to protect wild sockeye salmon returns.

Peak migration timing for wild Snettisham sockeye salmon through Stephens Passage is expected to be from mid-July through the first week in August. Management of the fishery in Stephens Passage will focus on conservation of the wild Snettisham sockeye salmon stocks, particularly in July. The department intends to implement extensive use of six-inch minimum gillnet mesh size restrictions in Section 11-B south of Circle Pt. in order to limit harvest rates on wild Snettisham sockeye salmon and yet allow harvest of enhanced chum salmon returning to the Limestone remote release site. The mesh restriction in Section 11-B may be relaxed at the end of July or after the peak migration timing of wild Snettisham sockeye salmon stocks through Stephens Passage. When the mesh restriction is relaxed in Section 11-B, a portion of Section 11-C from Midway Islands to Point Coke may open to allow additional access to hatchery sockeye salmon. Outer portions of Limestone Inlet may be opened in July to allow additional access to enhanced chum salmon. Port Snettisham will remain closed inside a line from Point Anmer to Point Styleman through the end of July to limit overall harvest rates on wild Snettisham sockeye salmon stocks. Commercial openings may occur inside Port Snettisham after this time if wild stock escapements are developing adequately.

Common property fishery openings are expected to occur during August in the DIPAC Speel Arm SHA, which is located in waters of Speel Arm north of 58°03.42' N latitude. Timing of these openings will depend on DIPAC progress toward brood stock and cost recovery goals and the sockeye salmon escapement to Speel Lake. DIPAC cost recovery efforts in the SHA during July will be limited to waters in the immediate vicinity of the hatchery where wild and hatchery stocks are well segregated. Fishery management decisions for the Speel Arm SHA will be made jointly by the department and DIPAC.

A personal use fishery will be allowed in Sweetheart Creek to ensure enhanced returns to this site are fully utilized; Sweetheart Creek is blocked to anadromous fish migration several hundred yards upstream from the mouth. The Sweetheart Creek personal use fishery will be open seven days per week.

Pink salmon will be harvested in Section 11-B incidental to the sockeye salmon and enhanced summer chum salmon fisheries. Fishing time for a directed pink salmon fishery in Section 11-C will depend upon the strength of pink salmon returns in lower Stephens Passage, Seymour Canal, and the northern portions of District 10. Parent year pink salmon escapements in Stephens Passage and Seymour Canal were below average. Returns will be closely monitored and if surpluses are present, openings could occur in August.

Beginning in mid-August, management of the Taku/Snettisham gillnet fishery will be based on the run strength of coho and fall chum salmon. Inseason management will be based on evaluation of the fishery catch, effort, and CPUE relative to historical levels, inriver run size estimates from the Taku River mark-recapture project, and recovery of coded wire tagged wild Taku River and hatchery coho salmon in marine fisheries. Coho salmon is the primary species managed during the fall season, but area and time restrictions may be necessary to further protect the weaker fall chum salmon returns.

In order to avoid gear conflicts, the District 11 drift gillnet fishery will not be open concurrent with the 2002 Juneau Golden North Salmon Derby. Consequently, during Statistical Week 35, the District 11 gillnet fishery will not open until Monday, August 26.

LYNN CANAL FISHERY

Introduction

The Lynn Canal drift gillnet fishery operates in the waters of District 15. The district is divided into three regulatory sections: 15-A (upper Lynn Canal), 15-B (Berners Bay), and 15-C (lower Lynn Canal). The Lynn Canal drift gillnet fishery targets sockeye, summer chum, coho, and fall chum salmon. Chinook and pink salmon are taken incidentally.

Sockeye salmon are mainly targeted from June through early September. The primary stocks originate in Chilkat and Chilkoot lakes, Berners Bay rivers, and mainstem spawning areas of the Chilkat River. Both the Chilkat and Chilkoot Lake sockeye salmon populations have early and late-run stock components with separate escapement goals.

Hatchery and wild summer chum salmon are harvested from late June through early August, and fall chum and coho salmon are targeted from September through mid-October. The primary fall chum salmon stocks originate in the Klehini and Chilkat rivers and the primary coho salmon stocks originate in the Chilkat and Berners Bay rivers.

Chinook salmon are harvested incidentally in the Lynn Canal drift gillnet fishery. The management objective for this species is to minimize chinook salmon harvests to stay within the Board of Fisheries allocation of all-gear quota (7,600 chinook for all Southeast gillnet districts).

2002 Outlook

The 1996 Chilkat Lake mark-recapture sockeye salmon escapement estimate totaled 262,900 sockeye salmon, including 172,400 early run fish, and 90,500 late run fish, well above the desired upper escapement goals for both stocks. The 1997 Chilkat Lake mark-recapture escapement estimate was 238,800 sockeye salmon, including 80,700 early run fish, and 158,100 late run fish, again exceeding the desired escapement goal range for both stocks. The Lynn Canal drift gillnet catches of Chilkat Lake sockeye salmon for return years, 1996 and 1997, were estimated to be 96,400 and 70,100 fish respectively, compared to the 1976 to 2001 historical average of 97,000 fish. Sockeye salmon smolt production from Chilkat Lake in 1999 and 2000, the dominant smolt years for the 2002 return, were estimated to be 1.81 million fish and 1.63 million fish, respectively. These smolt abundance estimates are 88% and 80%, respectively, of the historical 1989–1990 and 1994–2001 average. Based on standard marine survival and average adult age composition assumptions, a return of approximately 175,500 Chilkat Lake sockeye salmon is expected in 2001, 80% of the 1976–2001 average.

It is difficult to project total returns for stocks spawning in the Chilkat River mainstem and Berners Bay drainages because data is not as comprehensive as for Chilkat Lake. The estimated escapement (based on mark-recapture techniques) of Chilkat River mainstem sockeye salmon was approximately 13,200 in 1998 and 14,300 in 1999, the dominant parental brood years. These estimates of abundance were well below the

historical 1994–2001 average of 28,000 fish. Total escapement estimates are not available for Berners Bay sockeye salmon systems. Peak aerial escapements to Berners Bay streams were within the desired goal range in 1998 but below goals in 1999. The 1998 commercial harvest was estimated at 11,700 fish. This catch was 84% of the historical 1976–2001 average catch of 13,800 fish. Based on the information above and age data collected in 2001 from Chilkat mainstem spawning areas which showed a lower than average age compositions for 2-ocean age fish, a below average run of Chilkat River mainstem sockeye salmon is expected in 2002.

The Chilkoot Lake sockeye salmon weir count during the dominant parental brood year (1997) for the 2002 return was 44,300 fish (17,900 early run and 26,400 late run). The early run was within established goals but the late run was below these goals (Table 2). The Lynn Canal drift gillnet catch for the dominant brood year, 1997, was estimated to be 28,900 fish, 26% of the 1976 to 2001 historical average of 109,600 fish. Zooplankton abundance and biomass in Chilkoot Lake indicated improvement during 1998, when the majority of fry expected to return as adults in 2002 were rearing in the lake. The 1998 fall hydroacoustic estimate of 1.3 million fall fry in Chilkoot Lake was the third highest since measurements began in 1987 and is 1.4 times the historical average (958,050, range 285,500 to 3,066,100 for years 1987–1991 and 1995-2001). This information indicates that returns of Chilkoot Lake sockeye salmon in 2002 could be similar to last season.

Hatchery returns of summer chum salmon to remote release sites in Lynn Canal are expected to similar to 2001. Projections for the Boat Harbor return are approximately 120,100 fish, an increase from last year. No hatchery cost recovery fishery is planned for the Boat Harbor area so these fish will all be available for common property fishery harvest. The preliminary projection for the Amalga Harbor project is approximately 972,300 fish. These returns will be harvested in the gillnet fishery in Section 15-C and in a DIPAC cost recovery fishery in its Amalga Harbor Special Harvest Area in Section 11-A.

Peak aerial escapement counts of summer chum salmon in Sawmill Creek in 1997, 1998, and 1999 were 1,000, 1,100, and 3,100 fish respectively. Those peak aerial escapements are at or above the desired peak aerial escapement goal range for this index system. Cumulative peak counts of chum salmon in western Lynn Canal streams in 1997, 1998, and 1999 were 500, 2,300, and 2,800 fish respectively. Goals were not met in any of these years. The department is concerned about the status of wild chum salmon stocks along the western side of Lynn Canal. In recent years, escapements have been below desired levels. Management will look into strategies designed to reduce the exploitation rate of wild chum salmon in order to boost escapements into western Lynn Canal streams. Based on parental year escapement counts, the wild summer chum return in 2002 should be average to below average in run strength and also at a much lower scale than the hatchery summer chum salmon return.

Fall chum salmon returning to Lynn Canal are wild stocks originating primarily from the Klehini River, Chilkat River, and several Chilkat River tributaries. A smaller number of fall chum salmon are produced from the Herman Creek spawning channel and streamside incubation projects carried out by NSRAA. Parental year escapements for the 2002 return of fall chum salmon were low. Peak aerial counts in the Klehini River in 1997 and 1998 were 200 and 5,000 fish respectively, well below the peak aerial escapement goal for this stock. For the Chilkat River the peak aerial survey counts were 7,000 and 150 fish (1997 and 1998), also well below the peak aerial escapement goal for this stock. It is known, however, that aerial escapement counts are not very reliable for this system because of the glacial nature of the Chilkat River and the protracted spawning duration of these stocks. Other information that may be used as an indication of the strength of the fall chum salmon return is the fishery performance data from Lynn Canal. The fishery performance in the dominant parental brood years (1997 and 1998) was also poor. Based on this information the return of fall chum salmon stocks is, again, expected to be poor. Escapements of Chilkat River fall chum salmon since 1999 have been much improved. Management

strategies designed to sway harvests away from these stocks have been successful. Both fish wheel counts and aerial escapement surveys have indicated increased escapements of these fish into spawning areas of the Chilkat River during years 1999 through 2001.

The coho salmon return in Lynn Canal is comprised of several stocks. The largest coho salmon system is the Chilkat River, followed by the Berners River and Chilkoot River. Parental-year survey counts at the Chilkat, Berners, and Chilkoot rivers were generally above the ten-year average for all systems. The District 15 gillnet catch of 26,100 coho salmon in 1998 was approximately 33% of the previous ten-year average. Based on this information the coho salmon return is expected to be average to below average for 2002.

Sport Fish Division has, since 1991, conducted mark-recapture methods to determine the spawning abundance of Chilkat River chinook salmon. The resulting database will be used to refine escapement goals and future run forecasting models for this species. The interim escapement goal is 2,000 mature (≥age 1.3) chinook salmon. Sport Fish Division is in the process of reviewing this goal and plans on finalizing a biological escapement goal by the fall of 2002. The department is working with the Haines Advisory Committee to develop a Chilkat chinook salmon management plan that will be submitted to the Alaska Board of Fisheries. The primary purpose of this plan would be to establish a criterion that would help manage the various fisheries in Lynn Canal to ensure escapement goals for this species are met each year. The preliminary preseason forecast for mature (≥age 1.3) Chilkat chinook salmon is 6,800 fish, above the 1991–2001 average during 2002. There is no directed fishery for chinook salmon in Lynn Canal commercial fisheries but management actions have been implemented to reduce the incidental take of Chilkat River chinook salmon. These management actions have been effective in conserving Chilkat River chinook salmon stocks as the interim escapement goal has been met or exceeded each year since 1991.

Management Goals

Specific management goals for the 2002 Lynn Canal drift gillnet fishery are as follows:

1. Obtain escapement counts for early run (through week 28, July 14) and late run Chilkoot Lake sockeye salmon of 16,500 and 34,000 fish, respectively.

2. Obtain an escapement of between 52,000 and 106,000 sockeye salmon to Chilkat Lake. The escapement objective for the early stock is approximately 17,500 fish through week 33 (August 18) and 47,500 for the late stock.

3. Provide for sufficient wild chum, coho, and pink salmon spawning escapements to the Chilkat, Chilkoot, and Berners Rivers and other Lynn Canal systems, while harvesting those fish in excess of escapement needs.

4. Minimize, to the extent practical, the incidental harvest of chinook salmon.

Management Plan

In 2002 the department intends to manage the Lynn Canal drift gillnet fishery to obtain the lower ends of the escapement goal ranges for early and late stocks of Chilkoot Lake sockeye salmon. Depressed populations of Chilkoot Lake zooplankton that serve as the forage base for rearing juvenile sockeye salmon are thought to be limiting production from this system. The department believes targeting the low end of the escapement goal range is prudent to reduce the possibility of high fry production and resultant heavy predation on the lake's principal food source for sockeye salmon.

Section 15-A will open for two days south of the latitude of Seduction Point beginning 12:01 p.m., Sunday June 16. If the Chilkoot River weir count through June 13 is less than 4,500 sockeye salmon the eastern side of Section 15-A will be closed. If the weir count is 4,500 sockeye salmon or greater the eastern portion of 15-A may be opened. Chilkat Inlet will remain closed the first two weeks of the season to protect mature chinook salmon returning to the Chilkat River. Chinook salmon return timing data from the Sport Fish chinook salmon tagging program indicates that approximately 90% of the Chilkat River chinook salmon return has passed the inriver drift gillnet capture site at river mile seven by July 15. Assuming that the travel time from Chilkat Inlet to the Sport Fish Division tagging site is about ten days, the bulk of the Chilkat River chinook salmon return should be in the Chilkat River by about July 4 (week 27 in 2002).

The department has attempted to increase harvest rates on Chilkat Lake sockeye salmon by allowing extended fishing time and area in Chilkat Inlet and adjacent marine waters during years of high abundance. The success of this approach is limited because of terminal area closures designed to protect chinook salmon and Chilkat River mainstem sockeye salmon early in the season and fall chum salmon late in the fishing season. Chilkat River mainstem fish have a return timing that overlaps the Chilkat Lake early sockeye salmon run. There are no formal escapement goals for Chilkat River mainstem sockeye salmon. Data from the Chilkat River fish wheel mark-recapture program will be used to judge run strength inseason and escapement levels post season. The department is hopeful that this data may be used in the future to develop spawning escapement goals for this stock.

Due to this season's below average projected lower return of early Chilkat Lake sockeye salmon, it is anticipated that the northern boundary line will remain at Seduction Point until the second or third week of the season. Depending on the strength of the early Chilkat Lake sockeye salmon and the Chilkat River chinook salmon run, the northern boundary line may be moved to Glacier Point, or the northernmost tip of Kochu Island during the third week of the season. If the run strengths of Chilkat Lake sockeye salmon and Chilkat River chinook salmon warrant it, the northern boundary line in Chilkat Inlet may be moved north to Cannery Point during weeks 29 and 30. The area from Cannery Point to the Chilkat River mouth will be closed to protect Chilkat River mainstem sockeye salmon during that time. If the Chilkat Lake sockeye salmon run is stronger than anticipated the northern boundary line may be moved to the mouth of the Chilkat River during weeks 31–34. Section 15-A (west of a line beginning at a point within two nautical miles of the western shoreline of Lynn Canal at the latitude to Point Sherman, to Sullivan Rock Light, to Eldred Rock Light, to the southernmost tip of Talsani Island, to the northernmost tip of Talsani Island, to Seduction Point) may be opened for extended periods of time during the summer season, but due to this year's expected smaller run of Chilkat Lake sockeye salmon it is likely that fishing time in this area will be similar to 2001. Fishing time and area may be adjusted inseason and will be based on fishery performance and on stock assessment data, primarily from the fish wheels in the lower Chilkat River.

If the Chilkoot Lake sockeye salmon return is poor (run not forecasted to meet minimum escapement goals), the eastern side of Section 15-A will be closed for much of the season. Chilkoot Inlet will also be closed north of Seduction Point for most, if not all, of the summer season to protect Chilkoot Lake sockeye salmon if returns are poor. If the run does come in better than expected, Chilkoot Inlet north of Seduction Point and the eastern shoreline of Section 15-A south of Seduction Point could be opened.

Fall management will begin in late August or early September. Fall chum salmon conservation will drive fishery management in Section 15-A from week 35 until the end of the season. If the late run of Chilkat Lake sockeye salmon is very strong, the department will use a management approach to the early fall fishery in Section 15-A similar to that used in the fall of 1999. In order to target fishing on Chilkat Lake sockeye salmon while limiting the harvest of milling Chilkat River fall chum salmon during weeks 35 and 36 in 1999, Chilkat Inlet was open from the latitude of Point Seduction to the mouth of the Chilkat River and the remainder of Section 15-A was closed. The need to use this management strategy in 2002 will be assessed in season and will be based on the strength of the late run of Chilkat Lake sockeye salmon. The department will assess sockeye and fall chum salmon runs closely by monitoring fishery performance and inriver abundance at the Chilkat River fish wheels to adjust fishing time and area in Section 15-A.

Section 15-B will not be open in 2002 unless the return of coho salmon to Berners Bay is very strong.

Section 15-C will open for two days beginning 12:01 p.m., Sunday, June 16. If the Chilkoot River weir count is less than 4,500 sockeye salmon through June 13 the eastern side of Section 15-C will be closed north of the latitude of Bridget Point. If the Chilkoot Lake or Chilkat Lake sockeye salmon returns are poor (based on weir and fish wheel counts), there will be 6-inch minimum mesh size restrictions in Section 15-C (except for the Boat Harbor area). This gear restriction will be implemented to minimize the harvest of sockeye salmon while targeting summer hatchery chum salmon. If the Chilkoot River weir or Chilkat River fish wheel counts continue to be very poor and effort levels are higher than average, it is also possible that additional areas of Section 15-C may be closed. The decision to open additional area of this section and whether to remove or implement gear restrictions will be driven by Chilkoot River weir counts, Chilkat River fish wheel counts, effort levels, and inseason stock assessment information based on site specific scale samples.

The Boat Harbor area (those waters within two nautical miles of the western shoreline of Lynn Canal from the latitude of Danger Point at 58°41.73' N. latitude south to a point 2.4 miles north of Point Whidbey at 58°37.05' N. latitude) is expected to be opened for extended periods beginning in week 28 (July 7). The northern line of the Boat Harbor area at Lance Point will be moved approximately 2 nautical miles south to Danger Point. The purpose of this change in area is to decrease the exploitation rate on wild Endicott River and other western Lynn Canal chum salmon stocks, which migrate through this area during the early summer season. Poor aerial and foot survey counts of chum salmon in recent years will necessitate management actions to boost escapement for this species. The Boat Harbor area is expected to be open continuously beginning the second week of July. The western shoreline of Section 15-C will be closed north of Danger Point to protect wild summer chum salmon returning to the Endicott River from the start of the season to week 31 (June 16 to August 3). The department also plans to implement full retention (5 AAC 39.265) in the District 15 drift gillnet fishery as was done in 2001 beginning in week 27 (June 30).

Fall season management will begin in late August or early September in Section 15-C. A conservative management approach will again be implemented to ensure improved fall chum salmon escapement during the early weeks of the fall season. Management of Section 15-C during the fall season will be based on coho and chum salmon overall run strength and fishing effort levels. Fishing effort will be directed at harvesting returns of coho salmon in Lynn Canal while conserving fall chum salmon.

To avoid gear conflicts, the District 15 drift gillnet fishery will not be open concurrent with the Juneau Golden North Salmon Derby. Consequently, during Statistical Week 35, the District 15 gillnet fishery will not open until Monday, August 26.

TERMINAL HATCHERY FISHERIES

For the 2002 season, drift gillnet terminal area fisheries can be expected in Deep Inlet, Neets Bay, Nakat Inlet, Eastern Passage (Earl West Cove), Anita Bay, Speel Arm, and Boat Harbor to harvest salmon returning to DIPAC, NSRAA, and SSRAA enhancement facilities.

Northern Southeast Regional Aquaculture Association Terminal Area Fisheries

The terminal hatchery fishery at Deep Inlet will be managed jointly with NSRAA and according to Board of Fisheries management plans. The open gillnet fishing times and any modifications of the terminal fishing area will be announced by ADF&G news releases prior to, and during, the fishing season.

Terminal Area – Deep Inlet [5 AAC 33.376]

NSRAA expects a return of 900,000 chum salmon to the Deep Inlet remote release site and the Medvejie Hatchery in 2002. Cost recovery and broodstock goals for the Deep Inlet returns are 170,000 fish and 50,000 fish respectively, allowing for a common property harvest of approximately 680,000 chum salmon by purse seine, drift gillnet, and troll gear. The majority of this harvest can be expected to occur in the Deep Inlet THA by drift gillnet and purse seine gear, but some harvest is likely outside the THA by troll and purse seine gear as well. At their March meeting in Sitka the NSRAA board decided upon a reduced number of THA openings for the early part of the season in order to help achieve the season's cost recovery. The NSRAA board also approved a starting date of June 16 for the common property rotational fishery. Beginning June 16, the common property rotational schedule will be one day of seine and two days of gillnet per week. The THA rotational schedule will change to two days of seine and four days of gillnet after NSRAA has reached or is close to reaching broodstock and cost recovery goals for the season. The change in schedule is expected to occur sometime during the mid-August period of peak returns. The following rotational fishing schedule was adopted for the 2002 season:

From the beginning of the season until cost recovery goals are met:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Seine	CR/Troll	CR/Troll	Gillnet	Gillnet	CR/Troll	CR/Troll

After cost recovery goals are met until the end of the season:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Seine	Gillnet	Gillnet	Seine/Troll*	Seine/Troll*	Gillnet	Gillnet

*Seine and Troll gear alternates between Wednesday and Thursday.

The schedule indicated above is subject to inseason adjustments to ensure the NSRAA cost recovery remains on schedule and the seasonal cost recovery goal is achieved. An initial schedule for the THA will be published at the outset of the season, and when changes are necessary the revised schedule will be issued in a news release.

Cost recovery management is planned such that NSRAA may conduct cost recovery in the Deep Inlet Special Harvest area and in the Silver Bay Special Harvest Area. The Silver Bay Special Harvest area is expanded including most of Eastern Channel through July 23 and after the troll coho salmon closure in August, and is contracted to Eastern Channel and Silver Bay east of Galankin Island to Silver Point from July 24 through the August troll closure.

The Deep Inlet THA fishery will be managed jointly with NSRAA, and in accordance with the Deep Inlet Terminal Harvest Management Plan (5 AAC 33.376). The plan provides for the distribution of the harvest of hatchery-produced chum salmon between the purse seine and drift gillnet fleets. The ratio of gillnet fishing time to purse seine fishing time will be 2:1. Additionally, the Board of Fisheries has allowed trolling to occur when net fisheries are closed and when trolling does not interfere with cost recovery.

The terminal harvest area during the 2002 season will be as follows:

> **Deep Inlet THA**: Deep Inlet, Aleutkina Bay, and contiguous waters south of a line from a point west of Pirates Cove at 135°22'38" W. longitude, 56°59'21" N. latitude to the westernmost tip of Long Island to the easternmost tip of Long Island to the westernmost tip of Emgeten Island to the westernmost tip of Error Island to the westernmost tip of Berry Island to the southernmost tip of Berry Island to the westernmost tip of the southernmost island in the Kutchuma Island group to the easternmost tip of the southernmost island in the Kutchuma Island group to the westernmost tip of an unnamed island at 135°17'40" W. longitude, 57°00'18" N. latitude to a point on the southern side of the unnamed island at 135°16'47" W. longitude, 57°00'05" N. latitude and then to a point on the Baranof Island Shore at 135°16'32" W. longitude 56°59'56" N. latitude.

An alternate description of the Deep Inlet terminal harvest area is now published in the 2000–2003 Commercial Fishing Regulation booklet. The area is the same but the description now uses minutes and decimal degrees instead of minutes and seconds. Either description can now be used to describe the area.

During the 2002 season, the boundaries of the Deep Inlet THA may be changed by NSRAA and the department to help resolve conflicts between fishers and local private landowners in the area.

In order to promote full utilization of salmon, to prevent waste of salmon, to determine harvest patterns of incidentally harvested coho salmon, and to allow full and accurate reporting of returns, the Deep Inlet THA fishery will be managed in 2002 by emergency order under authority of 5 AAC 39.265 FULL RETENTION AND UTILIZATION OF SALMON to require that all salmon harvested in net fisheries are retained and utilized. Coho salmon harvested in the Deep Inlet THA that are not sold but are retained for personal use must be recorded on fish tickets [5 AAC 39.130 (c) (10)].

In early September the Deep Inlet THA boundaries may be adjusted by the department to reduce interception of wild coho salmon returning to Salmon Lake or hatchery coho salmon returning to

Medvejie Hatchery needed for broodstock. THA boundary adjustments to protect coho salmon will be based on historic run timing or inseason observations of abundance. Since voluntary compliance with reporting of coho salmon in the Deep Inlet Terminal Harvest Area fishery has been poor and the department needs detailed information on coho salmon harvest patterns, personnel from the department or FWP may board some vessels and conduct hold inspections to ensure compliance.

Southern Southeast Regional Aquaculture Association Terminal Area Fisheries

The terminal hatchery fisheries at Neets Bay, Nakat Inlet, and Earl West Cove (Eastern Passage) will be managed jointly with SSRAA and according to Board of Fisheries management plans. The open gillnet fishing times will be announced by ADF&G news releases prior to, and during, the fishing season.

Terminal Area – Neets Bay [5 AAC 33.370]

From the second Sunday in June through the third Sunday in July, the Neets Bay THA shall include those waters of Neets Bay east of the longitude of Chin Point to the closed waters at the head of the bay. After the third Sunday in July, the Neets Bay THA consists of those waters east of the longitude of the easternmost tip of Bug Island to the closed waters at the head of the bay.

In 2002 SSRAA is expecting a total return of 926,000 million summer chum, 250,000 fall chum, 160,000 coho, and 8,000 chinook salmon to return to Neets Bay.

Fisheries in Neets Bay will target on returning chinook salmon from May 15 through June 20 and fall chum and coho salmon from September 25 through the duration of the run. The Neets Bay fishery will be a rotational fishery according to 5 AAC 33.370.

The following rotation schedule will be in place for Neets Bay in 2002:

Wednesday, May 15 through Friday, May 31: open at all times to all gear groups.

Drift gillnet will be open from 12:00 noon to 12:00 noon during June on the following days:

Saturday, June 1 through Monday, June 3;
Thursday, June 6 through Saturday, June 8;
Tuesday, June 11 through Thursday, June 13;
Sunday, June 16 through Tuesday, June 18.

Drift gillnet will be open from 12:00 noon to 12:00 noon during September and October on the following days:

Wednesday, September 25 through Friday, September 27;
Monday, September 30 through Wednesday, October 2;
Saturday, October 5 through Monday, October 7;
Thursday, October 10 through Saturday, October 12.

Tuesday, October 15 until closed by emergency order: open at all times to all gear groups.

Terminal Area — Nakat Inlet [5 AAC 33.372]

The Nakat Inlet drift gillnet fishing area includes the waters of Nakat Inlet between 54°50’ N. latitude and 54°56' N. latitude. In 2002, approximately 150,000 summer chum, 20,000 fall chum, and 15,000 coho salmon are expected to return to Nakat Inlet.

Terminal Area — Eastern Passage [5 AAC 33.373]

The Eastern Passage (Earl West Cove) drift gillnet fishing area includes the waters of Eastern Passage south of 56°24.83' N. latitude and west of 132°06.60' W. longitude. In 2002, approximately 7,500 chinook, and 66,000 summer chum are expected to be returning to Eastern Passage. It is projected that about 6,400 chinook and 23,100 chum salmon will be available for harvest in the terminal area.

Terminal Area — Wrangell Narrows-Blind Slough [5 AAC 33.381]

In the Wrangell Narrows (District 6) terminal area, the projected chinook salmon return is 5,000 adults to the terminal area. Under provisions of the Wrangell Narrows-Blind Slough Terminal Harvest Area Management Plan 50% of the return over 4,000 chinook salmon (500) will be available for commercial troll catch in the terminal area. No terminal gillnet fishery is anticipated.

The total Crystal Lake Hatchery coho salmon return is expected to be 7,000 fish; of that, an estimated 2,200 fish will be available for sport and commercial harvest in the Wrangell Narrows-Blind Slough area. No commercial gillnet fishery is expected on these fish.

Terminal Area — Anita Bay

The Anita Bay terminal area consists of the waters of Anita Bay west of 132^{o}24.40' W. longitude. In 2002, approximately 20,000 coho salmon are expected to be returning. It is anticipated that approximately 3,600 of these will return to the terminal area and be available for harvesting in the rotational fisheries.

Terminal Area — Boat Harbor

DIPAC has been operating chum salmon remote release sites at Boat Harbor and Amalga Harbor since 1988 and 1991, respectively. This year the Boat Harbor return is expected to be approximately 120,000 fish, a slight increase from last year. No hatchery cost recovery fishery is planned for the Boat Harbor area so these fish will all be available for common property fishery harvest. Chum salmon returning to the Amalga Harbor remote release site in Section 11-A will also be intercepted in the Boat Harbor terminal fishery and in other areas of Section 15-C. The projection for Amalga Harbor returns is approximately 972,300 fish, again a reduction from last year. DIPAC will conduct a hatchery cost recovery fishery in its Amalga Harbor Special Harvest Area in Section 11-A to harvest chum salmon returning to the Amalga Harbor remote release site.

Special Harvest Area — Speel Arm

The expected return of Snettisham Hatchery sockeye salmon in 2002 is 294,000 fish, which is an increase from last year's total return of 282,000 fish. This return will be principally harvested in the traditional District 11 commercial gillnet fishery. Common property fishery openings are also expected to occur during August in the DIPAC Speel Arm SHA, which is located in waters of Speel Arm north of 58°03'25" N. latitude. Timing of openings in the SHA will depend on DIPAC's progress toward brood stock and cost recovery goals and the sockeye salmon escapement to Speel Lake. DIPAC cost recovery efforts in the SHA during July will be limited to waters in the immediate vicinity of the hatchery where wild and hatchery stocks are well segregated. Fishery management decisions for the Speel Arm SHA will be made jointly by the department and DIPAC.

FISHERY CONTACTS

The following people are Division of Commercial Fisheries contacts for this management plan:

Andy McGregor
Region 1 Supervisor
P.O. Box 240020
Douglas, AK 99824
(907) 465-4250

Scott Kelley
Region 1 Management Coordinator
P.O. Box 240020
Douglas, AK 99824
(907) 465-4250

Craig Farrington or Scott Sloane
Area Management Biologists
P.O. Box 240020
Douglas, AK 99824
(907) 465-4205

Phil Doherty, Don House,
or Scott Walker
Area Management Biologists
2030 Sea Level Drive, Suite 205
Ketchikan, AK 99901
(907) 225-5195

Bill Davidson or Dave Gordon
Area Management Biologists
304 Lake Street, Room 103
Sitka, AK 99835
(907) 747-6688

William Bergmann, Troy Thynes
Area Management Biologists
P.O. Box 667
Petersburg, AK 99833
(907) 772-3801

Randy Bachman
Fishery Biologist
P.O. Box 330
Haines, AK 99827
(907) 766-2830

Fishery Biologist
P.O. Box 200
Wrangell, AK 99929
(907) 874-3822

The following is a list of telephone numbers that may be called during the gillnet fishing season to obtain recorded announcements concerning areas open to gillnet fishing:

Ketchikan	-	(907) 225-6870
Petersburg	-	(907) 772-3700
Sitka	-	(907) 747-5022
Juneau	-	(907) 465-8905